

CLAIMS

1. A method of treating a proliferative disease comprising administering to an individual in need thereof an effective amount of a SIRT1 inhibitor.
2. A method according to claim 1 wherein the disease is cancer.
3. A method according to claim 2 wherein the cancer is a colorectal carcinoma.
4. An in vitro method of inducing apoptosis in a cell comprising administering a SIRT1 inhibitor to said cell.
5. A method according to claim 4, wherein the cell lacks at least one of functional p53, Bax and PUMA protein.
6. A method according to claim 4 or claim 5 wherein the cell is a tumour cell.
7. A method according to any one of claims 1 to 6, wherein the SIRT1 inhibitor is a siRNA, a dsRNA, a nucleic acid encoding such RNA, or a SIRT1 antisense RNA.
8. A SIRT1 inhibitor for use in a method of medical treatment.
9. A SIRT1 inhibitor for use according to claim 8, wherein said treatment is treatment of a proliferative disease.
10. A SIRT1 inhibitor for use according to claim 8 or claim 9 which is a siRNA, a dsRNA, a nucleic acid encoding such RNA or a SIRT1 antisense RNA.
11. Use of a SIRT1 inhibitor in the manufacture of a medicament for the treatment of a proliferative disease.
12. Use according to claim 11, wherein the proliferative disease is cancer.
13. Use according to claim 12, wherein the cancer is a colorectal carcinoma.

14. Use according to claim 12, wherein the cancer cells lack at least one of functional p53, Bax and protein.
15. Use according to any one of claims 11 to 14, wherein the SIRT1 inhibitor is a siRNA, a dsRNA, a nucleic acid encoding such RNA or a SIRT1 antisense RNA.
16. A siRNA which inhibits expression of SIRT1 in a cell.
17. A siRNA according to claim 16 which comprises a contiguous sequence of 10-30bp from the sequence of SEQ ID NO:1.
18. A siRNA according to claim 17 which is between 19 and 22 bp in length.
19. A siRNA according to claim 18 which is 19bp in length.
20. A siRNA according to claim 19 which has the siRNA sequence of SEQ ID NOs: 11 and 12.
21. A composition comprising a siRNA according to any one of claims 16 to 20 and a pharmaceutically acceptable excipient.
22. The method of any one of claims 1 to 6, wherein the SIRT1 inhibitor is a siRNA according to any one of claims 16 to 20.
23. The use of any one of claims 11 to 14, wherein the SIRT1 inhibitor is a siRNA according to any one of claims 16 to 20.
24. A method of identifying a SIRT1 inhibitor for use in a method according to any one of claims 1 to 7, the method comprising:
 - administering a candidate compound to cultured tumour cells in vitro;
 - determining whether SIRT expression and/or activity is reduced in said cells; and
 - assaying for apoptosis of said cells.

25. A method according to claim 24, wherein the cells lack at least one of functional p53, Bax and protein.
26. A method according to claim 24 or claim 25, further comprising the steps of administering said candidate compound to cultured normal cells in vitro and assaying for apoptosis of said cells.